

# CYLINDER PRESSURE TRANSDUCER AND RELATED METHOD

## Abstract

A pressure transducer for a hydrogen reciprocating compressor in a sour gas environment includes a sensor head including a diaphragm mounted on a free end of the sensor head. The diaphragm is constructed of a nickel-based alloy with gold plating on an exposed side thereof. A method of monitoring line pressure in a reciprocating hydrogen compressor in a sour gas environment includes a) providing a pressure transducer having a sensor head and a diaphragm located flush with a free end of the sensor head composed of a nickel-based alloy; b) applying a noble metal plating to one side of the diaphragm; and c) mounting the pressure transducer in a reciprocating compressor with the one side exposed to the sour gas.